PCMCIA Fast thernet Attached Port PC ard

EP-4101DL

USER'S MANUAL

EDIMAX

CE

FCC REGULATORY STATEMENTS

Part15, Class A

This device complies with Part 15 of FCC rules.
Operation is subject to the following two conditions:

1. This device may not cause harmful interface, and
2. This device must accept any interface received, including interface that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

☝ ***Changes or modifications not expressly approved by party responsible for compliance could void the user the user authority to operate the equipment.***

INTRODUCTION

This PCMCIA Fast Ethernet Attached Port PC Card is designed for any Notebook PC with a PCMCIA or CardBus PC Card slot.

With this PC Card, users can hook up to their Ethernet LANs at the speed of 100Mbps as 10 times faster than traditional LAN environment. Moreover, the support of full duplex mode makes the data rate double possible. The fantastic feature of 10/100M auto-negotiation eliminates the compatible troubles.

The PCMCIA Fast Ethernet Attached Port PC Card is Microsoft Plug and Play compatible. The installation under Windows 95/98/2000/NT can be easily done in minutes. The included NOS drivers ensure the compatibility to the widely used networking environments, such as Novell Netware, Microsoft LAN Manager, TCP/IP and more. The wide range Card and Socket Services (CSS) compatibility also makes the users trouble-free for their Intranet connection.

The PCMCIA Fast Ethernet Attached Port PC Card is simple to use, providing automatic installation, and no external power is required.

SYSTEM REQUIREMENTS

- An IBM compatible notebook computer with 386SX or higher processor
- At least one Type II PC Card socket
- Drivers and utilities provided with this product
- PCMCIA release 2.1 compliant Card Services and Socket Services.

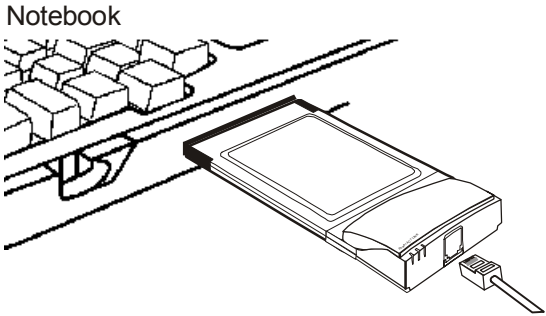
OPERATING ENVIORNMENTS

- Novell Netware 3.x/4.x
- Microsoft LAN Manager
- Packet Driver Applications

- Microsoft Windows for Workgroups 3.11
- Microsoft Windows 3.1
- Microsoft Windows NT 3.51, NT 4.0
- Windows 95
- Windows 98
- Windows 2000
- Lantastic 6.0
- IBM OS/2 Warp Version 3

HARDWARE INSTALLATION

1. Locate the PCMCIA slot of your system.
2. Align the PCMCIA Fast Ethernet Attached Port PC Card toward the PCMCIA slot. Push evenly and steadily until it is seated.

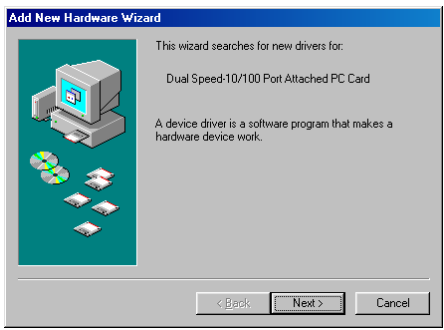


3. Connect the attached RJ-45 port with an Ethernet Hub/Switch.
4. You are now ready to continue the software installation.

SOFTWARE INSTALLATION

Installation for Windows 98

1. Once the PCMCIA Fast Ethernet Attached Port PC Card is connected to your computer, Windows 98 will automatically detect the new hardware device as shown below. Click **Next**.


Add New Hardware Wizard
This wizard searches for new drivers for:
Dual Speed-10/100 Port Attached PC Card
A device driver is a software program that makes a hardware device work.
< Back
Next >
Cancel

2. Insert the device driver diskette into your floppy drive. When Windows prompts you **What do you want Windows to do?** Select **Search for the best driver for your device. (Recommended)**. Click **Next**.

3. Follow the on-screen instruction to proceed.

Add New Hardware Wizard
Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
Floppy disk drives
CD-ROM drive
Microsoft Windows Update
Specify a location:
H:\WIN98SE.SRC\WIN98
Browse...
< Back
Next >
Cancel

4. The installation program will proceed automatically.

Add New Hardware Wizard
Windows driver file search for the device:
PCMCIA Fast Ethernet Attached Port PC Card
Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
Location of driver:
A:\NET100.INF
< Back
Next >
Cancel

5. If you are asked to insert Windows 98 CD-ROM in the selective drive, please do so to have Windows copy all the necessary files to your system. . When the following window appears, click **Finish**.

Add New Hardware Wizard
PCMCIA Fast Ethernet Attached Port PC Card
Windows has finished installing the software that your new hardware device requires.
< Back
Finish
Cancel

6. When Windows ask if you want to restart your computer, click **Yes**.

Installation for Windows 95

The installation procedures for the network driver may vary slightly depending on the version of Windows 95 you are using and also your current system configuration.

1. Once the PCMCIA Fast Ethernet Attached Port PC Card is connected to your computer, Windows 95 will automatically detect the new hardware device as shown below. Insert the program diskette #1 into your floppy drive.

2. Click **Next**. When the PCMCIA Fast Ethernet Attached Port PC Card message appears, click **Finish**. The Installation program will continue to copy the necessary files into your computer.

3. Follow the on-screen instruction to proceed. If Windows asks you to supply your original Windows 95 installation or setup files, insert the CD-ROM or disks as requested, and direct Windows 95 to the proper location.

4. When asked if you want to restart your computer, click **Yes**.

Installation for Windows NT 4.0

This section describes the installation for Windows NT under the condition that Windows NT is already installed in your computer. If your computer is not yet networking installed, refer to the Windows documentation for details. Also remember to have your original Windows NT CD-ROM handy before you begin the installation. For Windows NT may ask for it during the installation.

1. Before you turn on your computer, make sure the PCMCIA Fast Ethernet Attached Port PC Card has been properly inserted into the free PCMCIA slot of your computer.
2. Start Windows NT.
3. Click **Start→Settings→Control Pane**l. Double-click on the **Network** icon.
4. When the Network window appears, click on the **Adapters** tab. Click on the **Add** button, followed by **Have Disk**. Put the driver disk into drive A.
5. When asked to supply the path to the disk, type a:\ and click **OK**.
6. Windows NT will ask you to supply the I/O Base, Interrupt, and Memory values for the card. Good values to start with are 300 (for the I/O Base) and 5 (for the IRQ).
7. When you're finished, click **OK**. Windows NT will copy necessary files to your computer.

8. When the Network window reappears, click on the **Bindings** tab. Choose your bindings. Click on the Protocols tab and select your settings. Do the same for the **Services** tab.

9. After your **bindings**, **settings**, and **services** are set, click on the **Close** button. Choose to restart your computer. After Windows NT restarts, be sure to log in.

Installation for Windows NT 3.51

1. Open the **Control Panel**, and choose **Network Setup**.

2. Click the **Add Adapter** button.

3. Select "**<Other> Requires disk from manufacturer**".

4. Insert Driver Diskette in Drive A: and type **A:** in the path.

5. Select "**PCMCIA Fast Ethernet Attached Port PC Card**" from the list.

6. Set the IRQ level, I/O Port and Memory Base Address to the desired settings from the lists of free resources available. And click **OK**.

7. Click **OK** to exit Network Setup.

8. Insert the PCMCIA Fast Ethernet Attached Port PC Card. Reboot Windows NT.

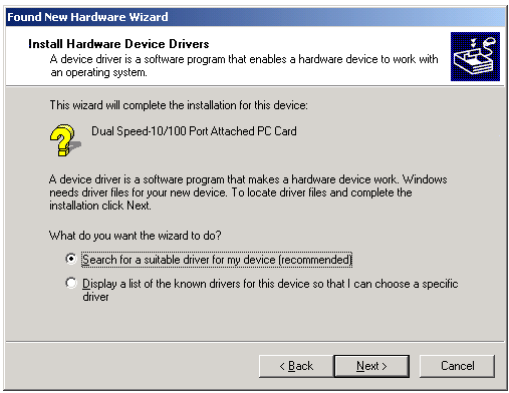
Installation for Windows 2000

1. Insert the PC Card into the slot. In New **Hardware Found** dialog box, select **Driver from disk provided by hardware manufacturer**.

2. When the **ADD NEW HARDWARE WIZARD** dialog box appears, press **Next**.

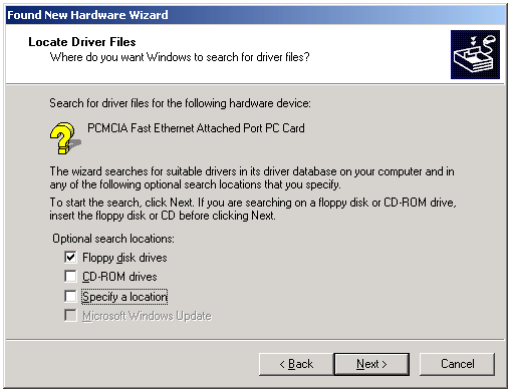
Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install a device driver for a hardware device.
To continue, click Next.
< Back
Next >
Cancel

3. When Windows prompt you a **ADD NEW HARDWARE WIZARD** dialog box, select **Search for the …** and press **Next**.


Found New Hardware Wizard
Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.
This wizard will complete the installation for this device:
Dual Speed-10/100 Port Attached PC Card
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.
What do you want the wizard to do?
Search for a suitable driver for my device (recommended)
Display a list of the known drivers for this device so that I can choose a specific driver
< Back
Next >
Cancel

4. Windows will prompt an **ADD NEW HARDWARE WIZARD** dialog box. In this time, select **Floppy disk drives** and insert the driver

diskette. Press **Next**. When asked for the original Windows 2000 CD/disks please follow the on-screen instruction.


Found New Hardware Wizard
Locate Driver Files
Where do you want Windows to search for driver files?
Search for driver files for the following hardware device:
PCMCIA Fast Ethernet Attached Port PC Card
The wizard searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify.
To start the search, click Next. If you are searching on a floppy disk or CD-ROM drive, insert the floppy disk or CD before clicking Next.
Optional search locations:
Floppy disk drives
CD-ROM drives
Specify a location
Microsoft Windows Update
< Back
Next >
Cancel

5. For the first time installation, click **Network** icon **in Control Panel** to add **Protocols**, **Client** and **Service** if needed.

6. Reboot your computer to activate the new device.

Installation for Windows Workgroup 3.11

NDIS3 Driver for Workgroup

1. Click on "**Network Setup**" icon in "**Network**" program group.

2. In "**Network Settings**" dialog box, click mouse on "**Networks**..." button to select the network operating system.

3. In "**Networks**" dialog box, check the radio button before "**Install Microsoft Windows Network**" and "**No Additional Network**". Press OK to go back to the Network Settings

screen.

4. Click on "**Drivers**..." button to select network driver.

5. In "**Network Drivers**" dialog box, press "**Add Adapter...**"button to enter "**Add Network Adapter**" dialog box. Select "**Unlisted or Updated Network Adapter**" and press **OK**.

6. Windows will prompt an "**Install Driver**" dialog box. In this time, put the software diskette into floppy drive and press **OK**.

7. Select the "**Enhanced mode NDIS3 for**...." string and press **OK**.

8. Follow Windows instructions to complete the installation and exit Windows.

9. Run INSTALL.EXE from driver diskette's root directory.

10. Select "**Windows for Workgroup**" in "**Network Operating Syste**m" screen and enter "**Driver Install**" screen.

11. If current settings are acceptable, select "**Start Installation**" and go to step 13. Otherwise, select "**Modify Parameters**" to make settings changed.

12. Move cursor to focus on the setting you want to make change and press Enter to select a fit value. When the configuration is accepted, press Enter on the **OK** field to exit the screen. Back to step 11.

13. Select "**NDIS Server (LAN Manager,...)**" as the network server you will attach to and press

Enter key.

14. Installation program starts copying related files from diskette to the destination directory and modifies AUTOEXEC.BAT and NET.CFG under user's agreement.

15. Installation is complete. Please reboot the computer to have the driver take effect.

NDIS2 Driver for Workgroup

1. Click on "**Network Setup**" icon in "**Network**" program group.

2. In "**Network Settings**" dialog box, click mouse on "**Networks**..." button to select the network operating system.

3. In Networks dialog box, check the radio button before "**Install Microsoft Windows Network**" and "**No Additional Network**". Press **OK** to go back the Network Settings screen.

4. Click on "**Drivers**..." button to select network driver.

5. In "**Network Drivers**" dialog box, press "**Add Adapter**..." button to enter "**Add Network Adapter**" dialog box. Select "**Unlisted or Updated Network Adapter**" and press OK.

6. Windows will prompt an "**Install Driver**" dialog box. In this time, put the software diskette into floppy drive and press **OK**.

7. Select the "**Real mode NDIS2 for**...." string and press **OK**.

8. Follow Windows instructions to complete the

installation and exit Windows.

9. Run INSTALL.EXE from driver diskette's root directory.

10. Select "**Windows for Workgroup**" in "**Network Operating System**" screen and enter "**Driver Install**" screen.

11. If current settings are acceptable, select "**Start Installation**" and go to step 13. Otherwise, select "**Modify Parameters**" to make settings changed.

12. Move cursor to focus on the setting you want to make change and press Enter to select a fit value. When the configuration is accepted, press Enter on the OK field to exit the screen. Back to step 11.

13. Select "**NDIS Server (LAN Manager,**...)" as the network server you will attach to and press Enter key.

14. Installation program starts copying related files from diskette to the destination directory and modifies AUTOEXEC.BAT and NET.CFG under user's agreement.

15. Installation is complete. Please reboot the computer to have the driver take effect.

ODI Driver for Workgroup

1. Click on "**Network Setup**" icon in "**Network**" program group to install network driver.

2. In Network Settings dialog box, click on "**Networks**..." button to select the network operating system.

3. In "**Networks**" dialog box, check the radio button before "**Install Microsoft Windows Network**" and "**Others:**". Then select one of Netware Shell, 3.X or 4.0 and above, and press OK to go back the "Network Settings" screen.

4. Click on "**Drivers**..." button to select network driver.

5. In Network Drivers dialog box, press "**Add Adapter...**"button to enter "**Add Network Adapter**" dialog box. Select "**Unlisted or Updated Network Adapter**" and press OK.

6. Windows will prompt an "**Install Driver**" dialog box. In this time, put the software diskette into floppy drive and press OK.

7. Select the "**Netware ODI Driver** ...." string and press OK.

8. Follow Windows instructions to complete the installation and exit Windows.

9. Run INSTALL.EXE from driver diskette's root directory.

10. Select "**Windows for Workgroup**" in "**Network Operating System**" screen and enter "**Driver Install**" screen.

11. If current settings are acceptable, select "**Start Installation**" and go to step 13. Otherwise, select "**Modify Parameters**" to make settings changed.

12. Move cursor to focus on the setting you want to make change and press Enter to select a fit value. When the configuration is accepted,

press Enter on the OK field to exit the screen. Back to step 11.

13. Select "**Novell Netware Server**" as the network server you will attach to and press Enter key.
14. Installation program starts copying related files from diskette to the destination directory and modifies AUTOEXEC.BAT and NET.CFG under user's agreement.
15. Installation is complete. Please reboot the computer to have the driver take effect.

Installation for Netware DOS ODI Driver

Automatic Installation

1. Run **INSTALL.EXE** from driver diskette's root directory.
2. Select "**Netware 3.x or 4.x workstation**" in "**Network Operating System**" screen and enter "**Driver Install**" screen.
3. If current settings are acceptable, select "**Start Installation**" and go to step 5. Otherwise, select "**Modify Parameters**" to make settings changed.
4. Move cursor to focus on the setting you want to make change and press Enter to select a fit value. When the configuration is acceptable, press Enter on the OK field to exit the screen. Back to step 3.
5. Installation program starts copying related files from diskette to the destination directory and modifies **AUTOEXEC.BAT** and **NET.CFG** under user's agreement.

6. Installation is complete. Please reboot the computer to make your Netware connection.

Manual Installation

1. Copy the **A:\NETWARE\LE100ODI.COM** file from diskette to the Netware client directory containing Novell's **LSL.COM, IPXODI.COM** and **NETx.COM** files.

2. Follow Novell's instructions on using ODI programs. You can substitute the **LE100ODI.COM** whenever a reference is made to the Hardware Specific Module.

A typical ODI workstation startup batch file includes:

```
>LSL          ; Link Support Layer Module
                provided by Novell
>LE100ODI     ; Hardware Specific Module
>IPXODI       ; IPX Protocol Stack Module
                provided by Novell
>NETx         ; DOS Shell Support Module
                provided by Novell
>LOGIN
```

Novell Client Installation

1. Run the NetWare Client Install v1.21-
   - Get the 4 Client disks from the network administrator or
   - Run the **\NWCLIENT\INSTALL.EXE** in a previous installation

2. A message appears on the screen asking you

whether or not you want the program to perform modifications on your **AUTOEXEC.BAT** and **CONFIG.SYS** files.

3. Answer "**Yes**". The program then modifies your **AUTOEXEC.BAT** and **CONFIG.SYS** files accordingly and creates backup copies.
4. The following message appears:

   -Install support for MS Windows? (Y/N):

5. Answer accordingly and provide a path if necessary.
6. The program displays the following:

Configure your workstation for backup by a NetWare server running software such as SBACKUP? (Y/N): No

7. Answer accordingly and provide a path if necessary.
8. Select a driver for your network board.
9. From the driver list, select "**Other Drivers**".
10. Go to the Insert the Driver Disk dialog box and specify the path where the ODI driver and INS files reside. For example: **C:\NETWARE.**
11. Press Enter and select the target ODI driver.
12. Specify the driver's optional settings.
13. Press F10 to save to new configuration.
14. Highlight "Install press here" and press <Enter> to install.
15. The program copies the necessary files for NetWare Client. Continue the installation

procedure to completion. Upon completion, a new **NET.CFG** file will be created in your DOS directory. Typically, this file contains the following lines:

Link Driver LE100ODI

PORT 320

INT 11

#FRAME Ethernet_802.3

FRAME Ethernet_802.2

:

Edit **STARTNET.BAT** for the ODI workstation performs the following:

SET NWLANGUAGE=ENGLISH

--Set NetWare 4.X to English language

LSL	--Link Support Layer Module provided by Novell
LE100ODI	--Hardware Specific Module
IPXODI	--IPX Protocol Stack Module provided by Novell
VLM	--DOS Support Module provided by Novell
F:	--Change to connected device
LOGIN .ADMIN	--Login to file server as user ADMIN

16. Run STARTNET to access the Novell network.

APPENDIX A. SPECIFICATIONS

Network Interface Specifications

- IEEE 802.3 for 10BaseT
- IEEE 802.3u for 100BaseTX

Data Rate

- 10/100 Mbps, Double data rate in Full Duplex mode

Operating Systems

For Notebook PC: (with accessory adapter)

- Novell Netware 3.x, 4.x
- Microsoft LAN Manager
- Packet Driver Applications
- Microsoft Windows for Workgroups 3.11
- Windows 3.1
- Microsoft Windows NT 3.51, NT 4.0
- Windows 95/98
- Windows 2000

Power Requirements

Normal Operation: +5V DC

- 10M: 190mA max
- 100M: 260mA max

General Specification

LEDs: Three LEDs on the Attached Port

- LINK/RX Green (ON/Blink)
- POWER/TX Green (ON/Blink)
- 10/100M Green (OFF/ON)

Environments Ranges

Operating:	32°F to 149°F (0°C to 65°C)
Storage:	-4°F to 158°F (0°C to 70°C)
Humidity:	10% - 90%, noncondensing

Certifications

FCC, Part 15, Class A, VCCI-A

1998 CE Mark (EN55022/EN55024, 1998 Class A)